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TECH CENTER 1600/2900

SEQUENCE LISTING

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Lily M. King
Deborah Krakow

<120> 3-Phosphoadenosine-5-Phosphosulfate (PAPS) Synthetase Proteins and Methods for Treating Osteoarthritic Disorders

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Tyr Leu Val Ser His Ala Ile Pro Cys Tyr Ser Leu Asp Gly Asp Asn
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Glu Glu Asn Ile Arg Arg Ile Ala Glu Val Ala Lys Leu Phe Ala Asp
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Ala Gly Leu Val Cys Ile Thr Ser Phe Ile Ser Pro Phe Ala Lys Asp
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Arg Glu Asn Ala Arg Lys Ile His Glu Ser Ala Gly Leu Pro Phe Phe
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Thr Gly Leu Ser Gly Ala Gly Lys Thr Thr Ile Ser Phe Ala Leu Glu
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Glu Tyr Leu Val Ser His Ala Ile Pro Cys Tyr Ser Leu Asp Gly Asp
65                  70                  75                  80
Asn Val Arg His Gly Leu Asn Lys Asn Leu Gly Phe Ser Ala Gly Asp
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Arg Glu Glu Asn Ile Arg Arg Ile Ala Glu Val Ala Lys Leu Phe Ala
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Asp Ala Gly Leu Val Cys Ile Thr Ser Phe Ile Ser Pro Phe Ala Lys
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Asp Arg Glu Asn Ala Arg Lys Ile His Glu Ser Ala Gly Leu Pro Phe
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Phe Glu Ile Phe Val Asp Ala Pro Leu Asn Ile Cys Glu Ser Arg Asp
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Leu Lys Thr Asn Leu Ser Ser Val Ser Asp Cys Val Gln Gln Val Val
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Ile His Glu Leu Phe Val Pro Glu Asn Lys Val Asp Gln Ile Arg Ala
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<210> 25
<211> 22
<212> DNA
<213> Mus musculus

<400> 25
gataaagctg gtgatgcaaa cc 22

<210> 26
<211> 20
<212> DNA
<213> Mus musculus

<400> 26
catgggatgg cgtgagatac 20

<210> 27
<211> 23
<212> DNA
<213> Mus musculus

<400> 27
cataagcttt gctttggaag agt 23

<210> 28
<211> 21
<212> DNA
<213> Homo sapiens

<400> 28
gcatgtccag acagacacca c 21

<210> 29
<211> 333
<212> DNA
<213> Homo sapiens

<220>
<223> D19Mit13 locus and flanking sequences

<221> misc_feature
<222> (1)...(333)
<223> n = A,T,C or G; at nucleotide positions 23 and 305

<400> 29
ctgactatga gaaacctgaa acnccagagt gtgtgctgaa gaccaacctg tcttcagtaa 60
gcgactgtgt gcaacaggtg gtggaacttt tgcaggagca ggtaggaggg tggttcttgc 120
cagtgtgttc agtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgcgtgtgca tgtgtgtgtg 180
catgtgtgtg tgcgtgtgca tgtgtgtgtg ttgaaagata atctgagttt ctttattccc 240
tggccaatct cagtaactat tgccaatttc gtttcccaca gaacattgta ccccacacca 300
ccatnaaagg catccacgaa ctctttgtgc cag 333

<210> 30
<211> 18
<212> DNA
<213> Homo sapiens

<220>
<223> Nucleotide positions +1414 through +1431 of PAPSS2 coding sequence

<400> 30
gatcccaagt caaccatt 18

<210> 31
<211> 6
<212> PRT
<213> Homo sapiens

<220>
<223> Partial PAPSS2 peptide sequence; amino acid residues 472 through 477

<400> 31
Asp Pro Lys Ser Thr Ile
1 5

<210> 32
<211> 18
<212> DNA
<213> Homo sapiens

<220>
<221> mutation
<222> (0)...(0)
<223> Nucleotide positions +1414 through +1431 of PAPSS2 coding sequence with mutation c to a at nucleotide position +1424

<400> 32
gatcccaagt aaaccatt 18

<210> 33
<211> 3
<212> PRT
<213> Homo sapiens

<220>
<223> Partial truncated PAPSS2 peptide sequence; amino acid residues 472-474 plus stop at position 475

<400> 33
Asp Pro Lys
1